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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,551	12/03/2003	Chang-Chi Lee	MR1715-81	3997
4586	7590	06/17/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			MAYO III, WILLIAM H	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/725,551

Applicant(s)

LEE, CHANG-CHI

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Figures 1-7 lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the insulation material is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.
2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Marked-up Drawings" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the

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improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. The abstract of the disclosure is objected to because in lines 7-12, the abstract refers to purported merits or speculative applications of the invention, which is improper content for the abstract. The applicant should delete the lines. Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claim 1 is objected to because of the following informalities: The applicant should replace the term "the first core" to --a first core--, "the small solid conductor" to --a small solid conductor--, "the third core" to --a third core--, "the large solid conductor" to --a large solid conductor--, and "the fourth core" to --a fourth core--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites the limitation "the different gauge, varying quantity, and disparate cross sectional area conductor" in line 5-6, which is confusing and renders the claim indefinite. It is unclear how these parameters relate to the audio and video signal cable. The applicant should clarify the claim to clearly define the invention.

9. Claims 1-8 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eichmann et al (Pat Num 6,495,763, herein referred to as Eichmann) in view of Applicant's Own Admission of Prior Art (herein referred to as AOAPA). Eichmann discloses an audio and video signal cable (Figs 1-9, Col 1, lines 1-16). Specifically, with respect to claim 1, Eichmann discloses a cable (Fig 4) comprising a small solid conductor (13) surrounded by an insulation layer (3) forming a core (Fig 4), a large solid conductor (14) surrounded by an insulation layer (3) forming a core (Fig 4), a solid conductor (second 13), that may be rectangular in shape (Col 3, lines 1-5) and is surrounded by an insulation (second 3) forming a core (Fig 4), wherein the cores (Fig 4) are assembled and may be twisted into a twisted cord (Col 3, lines 10-12), wherein all of the cores (Fig 4) are covered by a shielding (15) and a jacket (outer 4) thereby forming the cable (Fig 4). With respect to claim 2, Eichmann discloses that the solid conductor (second 13) cross sectionally circular in shape (Col 3, lines 1-5). With respect to claim 3, Eichmann discloses that the solid conductor (second 13) may have a flat shape (rectangular, Col 3, lines 1-5). With respect to claim 4, Eichmann discloses that the solid conductor (second 13) is a wire of same gauges and furthermore disposed in various quantities (Fig 4).

However, Eichman doesn't disclose the cable having an insulated tinsel conductor (claim 1), nor the solid conductor having different gauges (claim 4), nor

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the solid conductor being silver copper alloy (claim 5), nor the solid conductor being two or more tinsels (claim 6), nor the solid conductor being two lengths of enamel covered wire (claim 7), nor the solid conductor being two lengths of 100% fiber covered copper (claim 8).

AOAPA teaches under the heading "Description of the Prior Art", that electrical wires and cables commonly utilize conductors for transmission of signals (Page 1, lines 8-12). Specifically, with respect to claim 1, AOAPA discloses that tinsel conductors are a common replacement for conventional conductors because they lower skin effect and exhibit high frequency transmission (Page 3, lines 8-10). With respect to claim 4, AOAPA teaches that conductors of different cross sectional area are commonly utilized for conventional audio and video signal cables (Page 1, lines 8-12). With respect to claim 5, AOAPA teaches that the conductors being made of silver copper alloy have a high material strength, are easy to process and the most practical for fabricating optimal conductance and rapid transmission, acoustic mellowness, transparency in audio and video cables (Page 2, lines 12-17). With respect to claim 6, AOAPA teaches that tinsel conductors are a common replacement for conventional conductors because they lower skin effect and exhibit high frequency transmission (Page 3, lines 8-10). With respect to claim 7, AOAPA teaches that the enamel-covered wires are commonly utilized as replacements for conventional conductors because they exhibit high purity and conductivity, wherein the overall outer insulation diameter can be substantially reduced (Page 3, lines 3-7). With respect to claim 8, AOAPA teaches that 100% fiber covered

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copper are commonly utilized as replacement for conventional conductors because they reduce core outer diameter and thus the overall cable diameter, increase tensile strength, thereby prolonging service life (Pages 2-3, lines 18-20 & 1-2 respectively).

With respect to claims 1 and 7-8, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the conventional conductors of Eichmann to comprise the solid conductor being a plurality of insulated tinsel conductor, having different gauges, being two lengths of enamel covered wire or being two lengths of 100% fiber covered copper as taught by AOAPA because AOAPA teaches that such a configuration lowers skin effect and exhibits high frequency transmission (Page 3, lines 8-10), exhibits high purity and conductivity, wherein the overall outer insulation diameter can be substantially reduced (Page 3, lines 3-7) and increases tensile strength, thereby prolonging service life (Pages 2-3, lines 18-20 & 1-2 respectively).

With respect to claim 4, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the conventional conductors of Eichmann to comprise the solid conductor having different gauges as taught by AOAPA because AOAPA teaches that such a configuration is commonly utilized for conventional audio and video signal cables (Page 1, lines 8-12) and since such a modification would have involved a mere change in size of a component and a change of size is generally recognized as being within the ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

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With respect to claim 8, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the conventional conductor of Eichmann to comprise the solid conductor to be silver copper alloy configuration as taught by AOAPA because AOAPA teaches that such a configuration conductors being made of silver copper alloy have a high material strength, are easy to process and the most practical for fabricating optimal conductance and rapid transmission, acoustic mellowness, transparency in audio and video cables (Page 2, lines 12-17) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416, the solid conductor being silver copper alloy.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Giffel et al (Pat Num 3,816,644), Cardas (Pat Num 4,628,151), Gabriel (Pat Num 6,545,213), Ono et al (Pat Num 5,976,070), Gabriel et al (Pat Num 3,433,890), Seyhaeve et al (Pat Num 5,408,560), Naylor et al (Pat Num 5,491,299), Miller (Pat Num 3,407,263), Peterson et al (Pat Num 2,212,700), Naylor et al (Pat Num 5,491,299), Dunlavy (Pat Num 5,510,578), and Peterson et al (Pat Num 5,516,986), all of which disclose cables having various conductor sizes.

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Communication

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WHM III

William H. Mayo III
Primary Examiner
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